

CATEGORY 100

SECTION 101 — CLEARING AND GRUBBING

101.01 DESCRIPTION. This work shall consist of clearing and grubbing within the limits specified in the Contract Documents.

101.01.01 Definitions.

- (a) **Clearing.** Clearing within the construction area includes removing and disposing of trees, brush, shrubs, vegetation, rotten wood, rubbish, fences and structures not specified in the Contract Documents for removal and disposal. Clearing outside the construction area is the removing and disposing of rubbish.
- (b) **Grubbing.** Grubbing is removing from the ground and disposing of all stumps, roots and stubs, brush and debris.
- (c) **Limits.** Limits of clearing and grubbing include the construction area and all ditch areas and stream or channel change areas. Limits of clearing may include the area between the construction area and the right-of-way or easement lines.
- (d) **Clearing and Grubbing Unit.** A clearing and grubbing unit is the area of erodible earth material exposed at one time, not to exceed 20 acres.
- (e) **Disturbed Area.** Any erodible material exposed by construction activities.
- (f) **Stabilization.** Providing vegetation or structural measures (seed, temporary or permanent mulch, soil stabilization matting, riprap, stone aggregate, and paving by asphalt or concrete) that will prevent erosion. The placement of one or more of these temporary or permanent stabilization measures as directed by the Engineer shall satisfy the requirements to proceed with the next grading unit or operation.
- (g) **Stabilized.** An area covered with erosion resistant material such as grass cover, seed and mulch, soil stabilization matting, riprap, stone aggregate, or paving by asphalt or concrete.

101.02 MATERIALS. Not applicable.

101.03 CONSTRUCTION.

101.03.01 Erosion and Sediment Control. Unless otherwise specified in the Contract Documents or as directed by the Engineer, the clearing and grubbing area shall be limited to a 20 acre grading unit per grading operation. Once this first unit is half graded, the Contractor will be allowed to proceed with the second 20 acre grading unit. With the permission of the Engineer, the Contractor will be allowed to exceed the one grading unit requirement to balance earth work or when grading interchanges. Erosion and sediment control shall conform to the Contract Documents and Section 308.

A grading operation is defined as the Contractor's ability to provide adequate resources to perform the grading in a timely manner and provide and maintain the proper erosion and sediment control measures. The Engineer will be the final authority in this determination. A grading unit need not be 20 contiguous acres. When wet soil conditions are encountered, the Contractor will be allowed to clear and grub and grade another unit providing the initial unit has been properly stabilized. No more than two grading units shall be active at any time.

101.03.02 Vegetation. The Engineer will designate and mark any trees, shrubbery and plants that are to remain in place, and the Contractor shall protect them from any damage as specified in GP-7.11. Branches of trees overhanging the roadway shall be cut and properly trimmed to maintain a vertical clearance of 16 ft. All trimming shall be done under the supervision of a tree expert employed by the Contractor and licensed by the State of Maryland, including trimming of trees by the Contractor for any other reason. Trimming and repair of cuts and scars shall conform to Section 712.

101.03.03 Fences. All fences within the right-of-way shall be removed and disposed of unless otherwise specified in the Contract Documents.

101.03.04 Mailboxes. All mailboxes within the limits of construction shall be removed and reset as directed by the Engineer.

101.03.05 Grubbing.

- (a) **Excavation Areas.** Within areas to be excavated, all embedded stumps and roots shall be removed to a depth of not less than 3 ft below the subgrade or slope surfaces. All depressions made below the subgrade or slope surfaces by the removal of stumps shall be refilled with materials suitable for embankment and shall be compacted as specified in Section 204.

- (b) **Low Embankments.** Areas where the total depth of the embankment is less than 3 ft shall be grubbed.
- (c) **High Embankments.** Areas where the embankment is 3 ft or more in depth, trees and stumps shall be cut off as close to the ground as is practical but shall not exceed 1 ft above the ground surface. Near the toe of embankment slopes, stumps or trees are prohibited within 1 ft of the slope surfaces.

101.03.06 Stream and Channel Changes. Stream or channel change areas shall be cleared and grubbed 5 ft beyond the top of the cut slopes.

101.03.07 Disposal.

- (a) **Burning.** When perishable material is burned, it shall be burned under the constant care of a watchperson. Burning shall conform to the applicable laws and ordinances of respective jurisdictions.
- (b) **Disposal Locations.** Materials and debris that cannot be burned and perishable materials shall be removed from the right-of-way and disposed of by the Contractor. The Contractor shall make all necessary arrangements to obtain suitable disposal locations and shall furnish the Engineer with a copy of resulting agreements.
- (c) **Wood Disposal.** Disposal of wood to the general public shall be accomplished off the job site. Any plan for disposal in this manner shall be submitted to and approved by the District Engineer prior to beginning the clearing and grubbing operation.

101.03.08 Destroying Trees or Wetlands, Beyond Clearing Limits. The Contractor shall not damage nor destroy any trees or wetland areas that exist beyond the clearing limits specified in Section 107.

The Contractor shall be responsible for all damage to trees and wetlands located beyond the clearing limits due to the Contractor's operations. The Contractor shall restore, to the satisfaction of the Engineer, any trees that have been damaged or destroyed at no additional cost to the Administration. Replacement of trees shall be in conformance with Section 710.

Mitigation of wetland impact shall be in conformance with the Occupying Wetlands provisions contained in the Contract Documents.

Replacement trees shall be of the same species as those damaged or destroyed unless otherwise directed by the Engineer. The replacement size shall be the same as the damaged or destroyed trees when the trees measure less than 4 in. diameter at breast height (DBH). Damaged trees

4 in. DBH or greater shall be replaced with 2 in. caliper trees in conformance with the following:

SIZE OF DAMAGED OR DESTROYED TREES in. DBH	NUMBER OF 2 in. CALIPER REPLACEMENT TREES
4	5
6	8
8	10
10	13
12	15
16	20
20	25
24	36
32	48
40	80
60	135
80	200
120 or Greater	360

NOTE: DBH shall be measured at 4.5 ft above the ground. Caliper shall be measured at 6 in. above the ground.

Replacement trees shall be planted within the limits of the project whenever possible, as determined by the Engineer. If not possible, a suitable location will be determined by the Engineer.

All work shall require a replacement period as specified in Category 700. In case of failure on the part of the Contractor to restore or replace the damaged tree or wetland at the start of the next appropriate planting season, the Contractor will have 48 hours to begin corrective action, after notification by the Engineer. If the Contractor has not taken the corrective actions within the specified time, the Engineer may proceed with corrective measures. The cost of the corrective measures will be deducted from any monies due under the Contract.

101.04 MEASUREMENT AND PAYMENT. Clearing and Grubbing will not be measured but will be paid for at the Contract lump sum price. The payment will be full compensation for the removal and disposal of fences, removal and resetting of mailboxes, selective tree trimming and scar repair, and removal and disposal of existing buildings when not covered as a specific pay item in the Contract Documents, and for all material, labor, equipment, tools, and incidentals necessary to complete the work.

SECTION 102 — REMOVAL AND DISPOSAL OF EXISTING BUILDINGS

102.01 DESCRIPTION. This work shall consist of the removal and disposal of existing buildings, including foundations, footings or any part thereof, and backfilling, as specified in the Contract Documents. The work also includes protection of the buildings until the removal and disposal are accomplished as directed by the Engineer. Locations of buildings included in the work will be designated in the Contract Documents by the circled numbers ①, ②, ③, etc.

102.02 MATERIALS. Not applicable.

102.03 CONSTRUCTION. The Contractor shall schedule the buildings and appurtenances for removal, razing, or occupation as one of the first items of work.

Any building used by the Contractor for purposes such as field office, storage, etc., may remain as an exception to the above but shall be removed and disposed of immediately when vacated.

Buildings and appurtenances designated for removal may be disposed of by burning if they are not located close to habitable dwellings and if not prohibited by local or State laws, regulations, ordinances, or by the fire marshal.

Salvaged materials shall become the property of the Contractor. When materials are sold by the Contractor and are removed by the purchaser, it shall be done only during daylight working hours and in company with a Contractor's representative.

The Contractor shall be responsible for posting and protecting the buildings from vandalism or theft until they are removed.

102.04 MEASUREMENT AND PAYMENT. Removal and Disposal of Existing Buildings will not be measured but will be paid for